April-18-13 10:28:03 AM

Item ID: 646.3910 646.3910 Accept Setup Start \*NS1\* \*N900040100\* Revision ID: B100135 Item Name: Shim **Start Date:** 4/18/13 **Start Qty: 30.00** \*30\* Cust Item ID: Required Date: 5/02/13 Req'd Qty: 30.00 \*30\* **Customer:** Reference: Run Process Plan: MLJ Date: 13-04-16 Tooling: Approvals: Date:\_\_\_\_ Stop QC: \_\_\_\_\_ Date: \_\_\_\_ SPC (Y/N): Date: \_\_\_\_ Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description **Run Hours** Code Qty Qty Number Stamp Draw Nbr **Revision Nbr** 646.3900 N/C 0.00 \*110\* 3**6** pr JM13-07-02 Waterjet 0.00 Memo FLOW CNC Waterjet 1-Cut as per Dwg Dwg Rev: MC10955.020 Prog Rev: \(\sum\_{\subset}\) < Blue Spring steel 2-Deburr if necessary 120 QC2- Inspect parts off machine FAI/FAIB 0.00 \*120\* QC Memo 0.00 Quality Control

									DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-	-CON	FORN	AANCE / UPDATE	QA Closed:	Date:	3
		A. 1.115.1	·- <u>-</u>		DISPOSITION			AGAINST	DEPARTMENT	<u> </u>	
Work Orde	r:				, , , ,	-, I				Water Jet	Engineering
Part N	0		, , , , , , , , , , , , , , , , , , , ,		Rework Scrap Use-as-is		ľ	Skid-tube Crosstube Machining Small Fab noforming Finishing		d. Eng. Coor. re/Packaging	Quality Other
NCR N	0			·	Work Order Update	_		Large Fab Composite		Supplier	ا لـا لـا
Root		1		Desci	ription of work order update	lr	nitial	Action	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chi	ef Eng	Description	Date	Verification	QC Inspector
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	Bending			-	Bend		Grain		Ovalized	_	Pressure/Forced
	<del></del> i	Not Conce	ntric to	o/s	BOM/Route		Hardwa		Over/Under		Temperature/Cure
	Cracks			ے د	Broken/Damaged	-		ion Incomplete	Part Incorre	<del> </del>	Weld
	<del></del>	//Crimped		L	Burrs			tions Incomplete/Unclear	Part Lost/M	- L.	Wrong Stock Pulled
	Cuffs			-	Contamination	<u> </u>	Mainte		Part Moved		
Heat Treat					Countersink		Mislabe		Positioned '	_	٦.,,
Inspection Strip in Tube					Cut Too Short	1	Misread	t	Power Loss	/Surge	Other
	Ripples			-	Drill Holes		Offset				
ļ		Waves in		n L	Drawing			Calibration			
Turning Sequence					Finish		Out of :	Sequence			

Outside Dimensions

Wave/Twist in Tube

Folio

Insp.

## Work Order ID 100135

150

\*150\* Packaging

Packaging

\*100135\*

Page 2 April-18-13 10:28:03 AM Item ID: 646.3910 Accept \*N900040100\* Setup Start Revision ID: Item Name: Shim Start Date: 4/18/13 **Start Qty: 30.00** \*30\* Cust Item ID: Required Date: 5/02/13 Reg'd Otv: 30.00 \*30\* Customer Reference: Run Process Plan: Date: Tooling: Approvals: Date: Stop QC: \_\_\_\_ Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Work Center ID Description Run Hours Code Number Stamp Qty Oty 130 OC8- Inspect parts - second check 0.00 \*130\* ΟĊ Memo Quality Control 140 Outsource process-Cadplate per QSI017 4.1.9.1 0.00 \*140\* CX 13/07/04 30 Outsource3 0.00 Issue P/O:\_2042 Outsource process - Cad plate

0.00

0.00

Receive-&-Inspect for Damage & Mat'l Certs

Memo

										DQA:	Date:	, <b>,</b> ,
1100 V	<i>(</i> N				WORK ORDER NON-	CON	IEAD!	AANICE / LIDI	DATE	DQA.	<i>Date</i> .	,
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<del>-</del>					DISPOSITION			o de la constanta de la consta	AGAINST DE		/PROCESS	
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					Rework			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
Part No.				Scrap Use-as-is	$\dashv$ $\dagger$		noforming	Finishing		re/Packaging	Other	
NCR No.					Work Order Update	-	mem	Large Fab	Composite	1100,3101	Supplier	
NCR NO.								°				
Root				Descr	iption of work order update	ı	nitial	Act	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
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Material												
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Other	_						1 1					
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Ĺ	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	ire		Over/Under	<u></u>	Temperature/Cure
	Cracks			L	Broken/Damaged	L	inspect	ion Incomplete		Part Incorre	ct	Weld
[	Crushed/	Crimped			Burrs		Instruc	tions Incomplete/	'Unclear	Part Lost/M	issing	Wrong Stock Pulled
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	Heat Trea	at		Γ	Countersink		Mislab	eled		Positioned \	Wrong _	_
Ī	Inspectio	n Strip in	Tube		Cut Too Short		Misrea	d		Power Loss,	/Surge	Other
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ľ	Torque V		Extrusio	n [	Drawing		Out of	Calibration				
Ţ					Finish		Out of	Sequence				
Ī	Wave/Twist in Tube				Folio		Outside	e Dimensions				

\*100135\*

Page 3 1

Item ID: Revision ID: Item Name: Start Date: Required Date Reference:	646.3910  Shim  4/18/13  2: 5/02/13	Start Qty: 30.00 Req'd Qty: 30.00	*30* *30*	Accept	*N900  Cust Item II  Customer:		<b>n</b> * :	Setup Start Stop	ı VI.	S1* S2*
Approvals:		lan:				te:		Run Start Stop	"	R1* R2*
Sequence ID/ Work Center I 160 *160* QC Quality Control	D	Operation Description QC5- Inspect part comple	teness to step on W/O	Set Up/ Run Hours 0.00 Show		Tool # Plan Code	Accept Qty	•	Reject Number	Insp. Stamp
*170 *170* Packaging Packaging		Identify as per dwg & Stor Memo ***IDENTIF' REV***	ck Location: 5759	0.00	P# AND				3/1/2	29 3
*180 *180* QC Quality Control		QC21- Final Inspection - V	Work Order Release	0.00			M(	J 13-	513	30 07-29

NCR: Y	es / No				WORK ORDER NON-CONFORMANCE / UPDATE										
										QA Closed:	Date				
Work Orde	r·				DISPOSITION		AGAINST DEPARTMENT/PROCESS								
Work Orde	' -			<del></del>	Rework	7	Skid-tube Crosstube				Water Jet	Engineering			
Part N	0.				Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality			
					Use-as-is	<b>7</b>   7	herm	noforming	Finishing	Rec/Stor	e/Packaging	Other			
NCR No.					Work Order Update	]		Large Fab	Composite		Supplier				
Root				Descri	ption of work order update	Init	tial	Ad	ction	Sign &					
Cause	Date	Step	Qty		or Non-conformance	Chief	Eng	Desc	cription	Date	Verification	QC Inspector			
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						FAULT	CATE	GORY							
Landir	ng Gear				General					7	٦				
1	Bending			_	Bend	$\vdash$	rain		<u> </u>	Ovalized		Pressure/Forced			
	Centre N	ot Conce	ntric to C	D/S	BOM/Route	<b>├</b> ──┤	ardwa			Over/Under	<b>}</b> −	Temperature/Cure			
]	Cracks				Broken/Damaged			on Incomplete	_	Part Incorre	-	Weld			
	Crushed/	Crimped.			Burrs .	<b>—</b>		ions Incomplete	/Unclear	Part Lost/M		Wrong Stock Pulled			
	Cuffs				Contamination	$\bigsqcup^{N}$	1ainte	enance	<u> </u>	Part Moved					
[	Heat Trea	at		<u></u>	Countersink	М	lislabe	eled		Positioned \	· .	<del></del> -			
	Inspectio	n Strip in	Tube		Cut Too Short	М	lisread	t		Power Loss,	'Surge	Other			
	Ripples in	n Bend			Drill Holes		ffset								
	Torque V	Vaves in I	Extrusion	า [_	Drawing		ut of (	Calibration							
	Turning S	Sequence			Finish		ut of S	Sequence		******					
	Wave/Twist in Tube				Folio	Outside Dimensions									

DQA: Date: , ,

Work Order ID: 100135

Parent Item:

646.3910

Parent Item Name: Shim

\*100135\*

\*646 3910\*

**Start Date: 4/18/13** 

Required Date: 5/02/13

**Start Qty: 30.00** 

Required Qty: 30.00

Comments:

IPP REV:A 12.12.23 NEW ISSUE DD VERF:

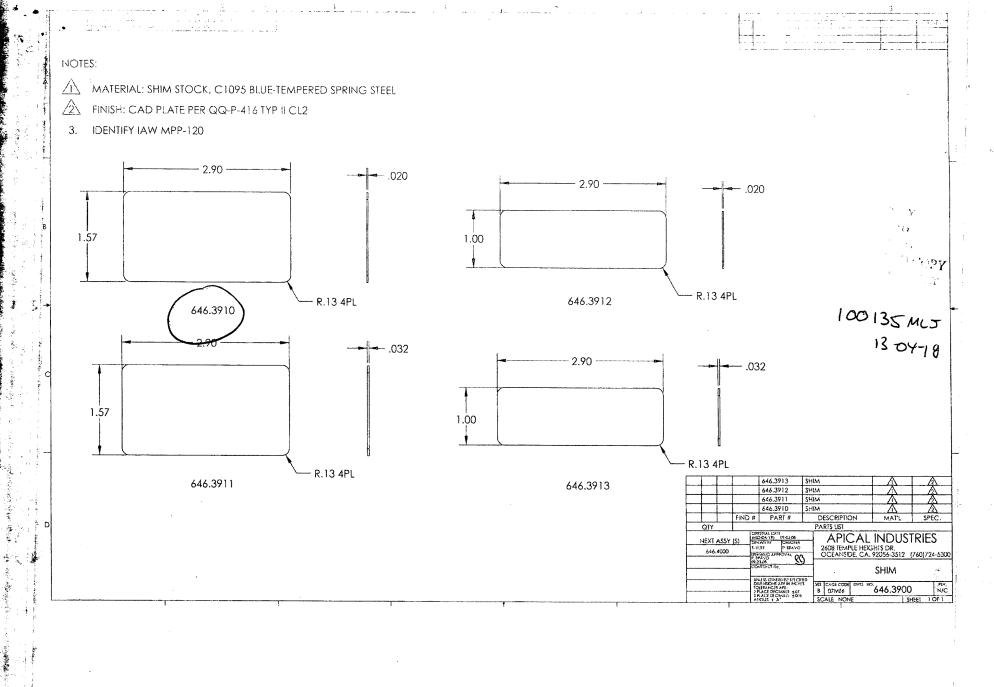
Table 18 Tab	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
MC1095S.020		Purchased	No			110	sf	8.4000	0.03	<del>-9.947368</del>				
*MC1095S	<u> </u>								**	1.0		Tm	B-02-1	<u>`</u> ~

C1095 Blue Tempered Spring Steel Sheet .020

Loc Qty Location Loc Code MAT022 123537 8.4

123537

s / No				WORK ORDER NON-	CONFOR	MANCE / UP	PDATE			;;;;
				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
				Rework Scrap Use-as-is Work Order Update	The	Machining Small Fall Thermoforming Finishin		Prod. Eng. Coor. Rec/Store/Packaging		Engineering Quality Other
			Desc	ription of work order update	Initial	Ac	ction	Sign &		
Date	Step	Qty		or Non-conformance	Chief En	g Des	cription	Date	Verification	QC Inspector
c/Data ip/Tooling erator terial up ner ccess oplier ining approved										
					FAULT CAT	EGORY				
Gear				General						_
Centre No Cracks Crushed/ Cuffs Heat Trea Inspection Ripples in Torque W	Crimped  at  n Strip in a Bend Vaves in E equence	Tube Extrusio		BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish	Hardy Inspe Instru Mair Misla Misre Offse Out o	vare ction Incomplete ctions Incomplete tenance beled ad t f Calibration f Sequence	:/Unclear	Over/Under Part Incorre Part Lost/M Part Moved Positioned	issing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled  Other
	Gear Bending Centre No Cracks Crushed/ Cuffs Heat Trea Inspectio Ripples in Torque W Turning S	Gear Bending Centre Not Concer Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Ripples in Bend Torque Waves in E	Date Step Qty  Gear Bending Centre Not Concentric to Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend	Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Rework Scrap Use-as-is Work Order Update or Non-conformance  General Bend Bend Bend Bend BoM/Route Broken/Damaged Burrs Contamination Countersink Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence  DISPOSITION  Rework Scrap Use-as-is Work Order Update or Non-conformance	DISPOSITION  Rework Scrap Use-as-is Work Order Update  Date Step Qty  Description of work order update or Non-conformance  Gear General Bending Centre Not Concentric to O/S Cracks Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence  Description of work order update or Non-conformance  FAULT CAT General  Bend Grain Grain Hardw General Bom/Route Hardw Hardw Contamination Main Misla Misla Out Too Short Misre Ripples in Bend Torque Waves in Extrusion Turning Sequence Finish  Out of	DISPOSITION  Rework   Scrap   Machining   Thermoforming   Large Fab    Date   Step   Qty   Description of work order update   Or Non-conformance   Chief Eng   Description of work order update   Or Non-conformance   Chief Eng   Description of work order update   Or Non-conformance   Chief Eng   Description of work order update   Or Non-conformance   Chief Eng   Description of work order update   Or Non-conformance   Chief Eng   Description of work order update   Or Non-conformance   Chief Eng   Description of work order update   Or Non-conformance   Chief Eng   Description of work order update   Or Sequence   Or Non-conformance   Chief Eng   Description of work order update   Or Sequence   Or Non-conformance   Or Non-conformance   Or Non-conformance   Or Sequence   Or Non-conformance   Or Sequence   Or Non-conformance   Or Sequence   Or Non-conformance   Or N	DISPOSITION	S / No WORK ORDER NON-CONFORMANCE / UPDATE  OA Closed:  DISPOSITION Rework Scrap Use-as-is Work Order Update Unitial Action Sign & Date  Step Qty Or Non-conformance Chief Eng Description  Gear General  Bending Centre Not Concentric to O/S BOM/Route Hardware Crushed/Crimped Brinking Description  Cracks Broken/Damaged Instructions Incomplete Part Incomplete Crushed/Crimped Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled Positioned Inspection Incomplete Unclear Part Moved Heat Treat Countersink Mislabeled Positioned Inspection Strip in Tube Cut Too Short Mispels in Bend Maintenance Power Loss, Mispels in Bend Drawing Out of Sequence Inspection Incomplete Inspection Incomplete Inspection Strip in Tube Cut Too Short Misread Power Loss, Mispels in Bend Inspection Incomplete Inspection Strip in Tube Cut Too Short Misread Power Loss, Mispels in Bend Inspection Incomplete Inspection Incomplete Inspection Strip in Tube Cut Too Short Misread Power Loss, Out of Calibration Out of Sequence Inspection Incomplete Inspection Incomplete Inspection Incomplete Inspection Incomplete Inspection Incomplete Inspection Strip in Tube Cut Too Short Misread Power Loss, Out of Calibration Out of Sequence Inspection Incomplete Inspection In	Disposition   Disposition   Against Department/Process   Water Jet



DART AEROSPACE LTD	Work Order: 100135
Description: SHIM	Part Number: (646, 3910
Inspection Dwg: 646.3900 Rev: 1/4	Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.90"	4-0.010	2.904"	_		υ	James
1.57"	11-0-010	1.567"	-		υ	
0.020"	11-0.010"	0.021"	-		V	
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		-				
	ļ					
	1		_	1		

Measured by: $\mathcal{J}_{\mathcal{M}}$	Audited by:	Preliminary Approval:	
Date: 13.0703	Date: 13/07/02	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

A 10.04.15

# Packing Slip

Dart Aerospace Ltd.

Hawksbury, ON K6A 1K7

1270 Aberdeen St.

Sold To:

ShipTo:



# **Cadorath Coating**

2150 Logan Avenue, Winnipeg, Manitoba R2R-0J2 Phone: (204) 633-9420 Fax: (204) 633-8033

INVOICE NUMBER:

**S**66940

Net 2% Interest Per Month charged on Overdue Accounts. Any claims for shortages, overcharges, or damaged goods must be made within seven (7) days from receipt of goods.

			Andrews Comment - Comment Comm		
Customer Order #:		Terms:	G.S.T. #: ♂	Ship Via:	Ship Date:
PO20424	Jul-09-2013	NET 30 DAYS	10071 6547 RT0001	2017/44-22/1002	5 Tol=25-2013
Item # Qty P/N & I	Description		tem = Gg ; / Fig	4 Déscription 190	***
1 20 EA SHIM	11/19 4 カノ		N: 100135 : 3		
P/N 646.3	910	$\mathbf{W}_{i}$	O 126435	ş	
2 20EA SHIM		S/I	N2 998417 EA HE	1131	
P/N 646.3	912	W	O 126436 *** A.	er skrigt	
3 30 EA SHIM	[	S/1	No 100136 ( ) ( )	15.2	
P/N 646.3	913		O 126437		i ve.
The same of the sa	" of " of " of the state of the				

#### **CERTIFICATE OF** CONFORMANCE

## CADORATH PLATING CO. LTD. 2150 LOGAN AVENUE WINNIPEG, MANITOBA R2J-0J1

DATE:

Jul-25-2013

CONSIGNED TO: Dart Aerospace Ltd.

1270 Aberdeen St.

Hawksbury, ON K6A 1K7

W/O #:

整线性 化基金元素 化氯亚丁

126435

INVOICE #:

66940

CONTRACT OR

PURCHASE ORDER #

PO20424

DESCRIPTION: SHIM A DESCRIPTION

20

P/N # 646.3910

S/N# 100135

る

STRIP IAW MIL-STD-871. CADMIUM PLATING IAW AMS-QQ-P-416C TYPE 2 YELLOW CLASS 2. BAKE HEAT CHART # 13-644 AND # 13-100 A PART # 13-644 AND # 13-100 AND # 649.

CERTIFICATE: I certify that the items indicated here on have been inspected and tested and conform to all specifications and requirements detailed on the contract or purchase order.

Approved Inspector:

